

IN THE CLAIMS

Claim 1. (Currently Amended) An audio signal processing method that performs virtual acoustic image localization processing of digital audio signals based on at least one type of information among position change information, movement information, and localization information of an acoustic image, the method comprising the steps of:

when there are a plurality of changes in said information within a prescribed period of time and an accumulated value of the plurality of changes exceeds a threshold value, generating single modified information at the end of said prescribed period of time based on said plurality of changes in said information; and

performing virtual acoustic image localization processing for said digital audio signals based on said generated single modified information,

wherein said prescribed period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 2. (previously presented) The audio signal processing method according to Claim 1, wherein

the step of generating said single modified information is performed using only said information presented last within said prescribed period of time.

Claims 3-11. (Canceled)

Claim 12. (Previously Presented) The audio signal processing method according to Claim 1, wherein said information for said digital audio signals can be modified according to user operations.

Claim 13. (Currently Amended) An audio signal processing method that performs virtual acoustic image localization processing for digital audio signals having at least one type of information among position change information, movement information and localization information of an acoustic image, based on said information, the method comprising the steps of:

when a plurality of said information elements are contained within a prescribed period of time and an accumulated value of the plurality of said information elements exceeds a threshold value, generating single modified information at the end of said prescribed period of time based on said plurality of said information elements; and

performing virtual acoustic image localization processing for said digital audio signals based on said generated single modified information,

wherein said prescribed period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 14. (Previously Presented) The audio signal processing method according to Claim 13, wherein

said step of generating a single information change is performed using only a last one of said plurality of said information elements presented within said prescribed period of time.

Claims 15-23. (canceled)

Claim 24. (Original) The audio signal processing method according to Claim 13, wherein

said information possessed by said audio signals can be modified according to user operations.

Claim 25. (Currently Amended) An audio signal processing method in which, when a plurality of information changes of at least one information type among position change information, movement information, and localization information of an acoustic image are applied to digital audio signals within a prescribed period of time and an accumulated value of the plurality of information changes exceeds a threshold value, the method comprising the steps of:

generating single modified information at the end of said prescribed period of time based on said plurality of information

changes;

performing virtual acoustic image localization processing in advance on said audio signals based on a plurality of localization positions of the digital audio signals and producing a plurality of synthesized audio signals;

and based on the generated single modified information, reading out from storage means, in which are stored the plurality of synthesized audio signals obtained from the localization processing, at least one of said synthesized audio signals,

wherein said prescribed period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 26. (Previously Presented) The audio signal processing method according to Claim 25, wherein

said step of generating a single modified information is performed using only a last one of said information elements presented within said prescribed period of time.

Claims 27-35. (canceled)

Claim 36. (Previously Presented) The audio signal processing method according to Claim 25, wherein

said information possessed by said digital audio signals can be modified according to user operations.

Claim 37. (Currently Amended) An audio apparatus,
comprising

an audio signal processing unit for performing virtual
acoustic image localization processing of digital audio signals
based on at least one information type among position change
information, movement information, and localization information
of an acoustic image thereon; and

information change generation means for generating, when a
plurality of changes are made to said information within a
prescribed time period and an accumulated value of the plurality
of changes exceeds a threshold value, single modified
information within said prescribed time period based on said
plurality of information changes, wherein

said audio processing unit is controlled, based on the
single modified information generated by said information change
generation means, to perform virtual acoustic image localization
processing of said digital audio signals,

wherein said prescribed period of time is an integral
multiple of the sampling period of said digital audio signals.

Claim 38. (Currently Amended) An audio signal processing
apparatus, comprising:

an audio processing unit for performing virtual acoustic
image localization processing of digital audio signals, having

at least one type of information among position change information, movement information, and localization information of an acoustic image, associated with time information and/or event information, based on said information; and

information change generation means for generating, when there are a plurality of said information changes within a prescribed time period and an accumulated value of the plurality of said information changes exceeds a threshold value, single modified information at the end of said prescribed time period based on said plurality of information changes, wherein

said audio processing unit is controlled, based on the single modified information generated by said information change generation means, to perform virtual acoustic image localization processing of said digital audio signals,

wherein said prescribed period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 39. (Currently Amended) An audio signal processing apparatus, comprising:

an information change generation means for generating, when a plurality of changes in at least one type of information for digital audio signals among position change information, movement information, and localization information of an acoustic image are requested within a prescribed time period and an accumulated value of the plurality of changes exceeds a

threshold value, single modified information at the end of said prescribed time period based on said plurality of information changes; and

storage means for storing a plurality of synthesized audio signals obtained from the localization processing, wherein

virtual acoustic image localization processing is performed in advance on said digital audio signals based on a plurality of localization positions of the digital audio signals, and based on said single modified information generated by said information change generation means, from said storage means in which are stored the plurality of synthesized audio signals obtained from this localization,

wherein said prescribed period of time is an integral multiple of the sampling period of said digital audio signals.